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ABSTRACT

This Interest Inventory contains three inventories: Academic Interest Measure (AIM), Pupil Activity Inventory (PAI), and Semantic Differential test (SD). The AIM measures six subscales of academic interests; the PAI measures non-school activities in science; and the SD measures attitudes toward science and physics. The inventories are designed for upper secondary students and adults. (MH)

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INTEREST INVENTORY

Student's Name _____ Student Number _____
last first

Teacher's Name _____

This booklet contains the Academic Interest Measure, the Pupil Activity Inventory and the Semantic Differential test (SD). The approximate testing time for the three instruments is 40 minutes. Your responses are to be written in the test booklet. Be sure to provide the information requested at the top of this page.

Directions for each of the tests are inside.

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Project Physics, 1967-68

SE 020 515

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Academic Interest Measure

This Index lists 112 activities often carried on by high school students. Many of them are clearly related to specific fields of study. You are to circle whether you like (L), dislike (D), or are indifferent (I) to each of these activities.

You have probably never engaged in some of the activities which are listed. If the activity sounds interesting or desirable to you, answer that you like it; if it sounds boring or undesirable, answer that you dislike it; and if you have no feeling about it one way or the other, answer that you are indifferent to it. If you do not know how to do some of the activities, such as writing stories or playing the piano, mark them according to whether you would like, dislike, or be indifferent to learning how to do them.

Try to mark every item. Work rather rapidly and trust the way you feel about each item as you read it.

Plan to allow about 20 minutes for this part of the Interest Inventory.

DO NOT TURN THIS PAGE UNTIL YOU ARE ASKED TO DO SO.

		Dislike	Indifferent	Like
1.	To put eggs into an incubator and open one every day to see how the chick develops.	1. D	I	L
2.	To write stories.	2. D	I	L
3.	To make posters.	3. D	I	L
4.	To experiment with plants to find out how various conditions of soil, water, and light affect their growth.	4. D	I	L
5.	To take part in class discussions of literature.	5. D	I	L
6.	To model with clay.	6. D	I	L
7.	To experiment with animals to see how different foods affect their health and growth.	7. D	I	L
8.	To speak at a club or class meeting.	8. D	I	L
9.	To draw illustrations for books or articles.	9. D	I	L
10.	To experiment with mouthwashes and antiseptics to find out whether they really prevent infection.	10. D	I	L
11.	To join a public speaking class.	11. D	I	L
12.	To make drawings to illustrate compositions.	12. D	I	L
13.	To learn how mathematics is used in figuring life insurance rates, taxes, etc.	13. D	I	L
14.	To analyze, compare, and criticize the platforms or proposals of different political parties.	14. D	I	L
15.	To have a job in a business office or store as training for a regular job.	15. D	I	L
16.	To take part in a mathematics club.	16. D	I	L
17.	To write about political or social issues, problems, or events.	17. D	I	L
18.	To typewrite business letters.	18. D	I	L
19.	To make rapid estimates of the answers to arithmetic calculations.	19. D	I	L
20.	To take part in discussions of current events both in school and at home.	20. D	I	L
21.	To see that an executive's day is organized for him.	21. D	I	L
22.	To use clever short cuts to certain mathematical calculations.	22. D	I	L
23.	To follow day-by-day reports of the development of some national or international situation or problem.	23. D	I	L
24.	To operate business machines such as the adding machine, the dictaphone, the mimeograph, etc.	24. D	I	L
25.	To dissect frogs and rats to find out what the skeleton, muscles, nerves, and organs are like.	25. D	I	L
26.	To write plays or skits.	26. D	I	L
27.	To carve in soap.	27. D	I	L
28.	To keep caterpillars and watch them develop into moths or butterflies.	28. D	I	L
29.	To write compositions.	29. D	I	L
30.	To devise designs for such things as book covers or the backs of playing cards.	30. D	I	L

GO ON TO THE NEXT PAGE.

		Dislike	Indifferent	Like
31.	To observe the birth of kittens, pups, calves, etc.	31. D	I	L
32.	To talk about poems in class.	32. D	I	L
33.	To make your own Christmas cards.	33. D	I	L
34.	To test soil conditions to find out how good they are for particular plants.	34. D	I	L
35.	To read several things by the same author.	35. D	I	L
36.	To paint murals; that is, to paint large pictures or designs on walls.	36. D	I	L
37.	To read about how different number systems developed.	37. D	I	L
38.	To read a book describing the current political and social affairs of a foreign country.	38. D	I	L
39.	To take a course in bookkeeping.	39. D	I	L
40.	To learn which famous mathematicians developed certain portions of mathematical theory.	40. D	I	L
41.	To compare historical events with present day political and social events.	41. D	I	L
42.	To answer business calls, give information and take messages.	42. D	I	L
43.	To attempt the solution of unsolved geometrical problems like trisecting an angle.	43. D	I	L
44.	To read detailed accounts by foreign correspondents of the backgrounds and causes of events in other countries.	44. D	I	L
45.	To have a job at the cash register of a store.	45. D	I	L
46.	To simplify complex-looking algebraic expressions.	46. D	I	L
47.	To compare accounts of the same events in different newspapers.	47. D	I	L
48.	To learn how to typewrite.	48. D	I	L
49.	To experiment on plants with different chemical fertilizers.	49. D	I	L
50.	To read Shakespearean and other plays.	50. D	I	L
51.	To design decorative objects such as lamps, bookends, ashtrays, etc.	51. D	I	L
52.	To test foods; for example, to find out how much fat there is in milk or how much sugar there is in ginger ale.	52. D	I	L
53.	To compete in a school essay-writing contest.	53. D	I	L
54.	To read about the lives of great artists.	54. D	I	L
55.	To collect and classify insects.	55. D	I	L
56.	To write articles for the school newspaper.	56. D	I	L
57.	To draw or sketch.	57. D	I	L
58.	To study the physical structure of insects, birds, or reptiles.	58. D	I	L
59.	To write about school activities for the school yearbook.	59. D	I	L
60.	To design clothes, textiles, etc.	60. D	I	L
61.	To describe lines, circles, and other figures by mathematical equations.	61. D	I	L
62.	To read magazine articles about current affairs, such as what our government is doing, what is going on in foreign countries, etc.	62. D	I	L

GO ON TO THE NEXT PAGE.

		Dislike	Indifferent	Like
63.	To learn how to take dictation in shorthand.	63. D	I	L
64.	To add and multiply very rapidly and correctly.	64. D	I	L
65.	To read about labor problems, strikes, unions, etc.	65. D	I	L
66.	To learn how to sell articles in a store.	66. D	I	L
67.	To try various mathematical tricks or puzzles.	67. D	I	L
68.	To study different systems of government: the English parliamentary system, the city manager plan, communism, fascism, etc.	68. D	I	L
69.	To learn how to keep the record books for a small business.	69. D	I	L
70.	To work problems in arithmetic.	70. D	I	L
71.	To study and discuss what our government should do about foreign affairs.	71. D	I	L
72.	To learn about the day-to-day work in a business office.	72. D	I	L
73.	To study how certain characteristics of plants and animals are inherited and how they may be improved by breeding.	73. D	I	L
74.	To read great novels written in the past.	74. D	I	L
75.	To study the history of art, architecture, etc.	75. D	I	L
76.	To study diseases: what causes them and how they may be prevented or treated.	76. D	I	L
77.	To study the development of English or American literature.	77. D	I	L
78.	To talk about painting, sculpture, and other arts with people who are interested in them.	78. D	I	L
79.	To find out how dangerous bacteria may be kept out of water, milk, and other foods.	79. D	I	L
80.	To talk about books in class.	80. D	I	L
81.	To learn to recognize the work of particular artists such as Rembrandt, Whistler, and Van Gogh.	81. D	I	L
82.	To collect and classify various kinds of plants.	82. D	I	L
83.	To read poetry.	83. D	I	L
84.	To paint pictures.	84. D	I	L
85.	To learn about different careers in mathematics.	85. D	I	L
86.	To find out when certain historic events took place, when certain famous people lived, etc.	86. D	I	L
87.	To keep an accurate file of business letters and papers.	87. D	I	L
88.	To work on algebra problems.	88. D	I	L
89.	To find out how historical events in one country or at one time were influenced by events in other countries or at other times.	89. D	I	L
90.	To take care of the correspondence for a business.	90. D	I	L
91.	To read about new advances in mathematics.	91. D	I	L
92.	To study the history of present political and social problems to find what causes them and what has been done about such problems in the past.	92. D	I	L
93.	To learn efficient methods of filing and retrieving office records.	93. D	I	L

GO ON TO THE NEXT PAGE.

		Dislike	Indifferent	Like
94.	To work out proofs of exercises in geometry.	94. D	I	L
95.	To study the course of events leading up to some current political or social situation.	95. D	I	L
96.	To fill out business forms.	96. D	I	L
97.	To study rock formations and learn how they developed.	97. D	I	L
98.	To find out what light is and how it may be used or controlled, as in optical instruments.	98. D	I	L
99.	To learn about atomic energy and its uses.	99. D	I	L
100.	To find out what certain substances like soap, polyethylene, paint, etc., are made of.	100. D	I	L
101.	To learn to detect what chemicals are in an unknown substance.	101. D	I	L
102.	To understand problems of space travel such as vacuum and gravity.	102. D	I	L
103.	To experiment with lenses to find out how a telescope or a microscope is constructed.	103. D	I	L
104.	To use chemical laboratory apparatus.	104. D	I	L
105.	To read about radiation belts in space.	105. D	I	L
106.	To find out why magnets work.	106. D	I	L
107.	To visit a nuclear reactor.	107. D	I	L
108.	To learn about the sources of electricity and how they work.	108. D	I	L
109.	To read about new scientific developments with transistors, communications satellites, lasers, etc.	109. D	I	L
110.	To read about the construction and use of radio telescopes.	110. D	I	L
111.	To read about the lives of great scientists.	111. D	I	L
112.	To learn the names of common minerals.	112. D	I	L

GO ON TO THE NEXT PAGE.

PUPIL ACTIVITY INVENTORY

Directions

1. There are no right or wrong answers. An answer is right if it is right for you.
2. Indicate how often you have done the things mentioned in the statements voluntarily, because you were interested, during the past school year.
3. Blacken the appropriate space on the answer sheet to show how often you have done each thing. Mark your answers as follows:

THINGS I HAVE DONE THIS SCHOOL YEAR BECAUSE I AM INTERESTED	I HAVE DONE THIS THING				
	Never	Once	A few times	About once a month	At least once a week
0. Gone fishing.	1	2	3	4	5

If, for example, you have done this about once a month, blacken space 4 on the answer sheet; if you have done this once, blacken space 2.

Plan to allow five minutes for this part of the Interest Inventory.

GO ON TO THE NEXT PAGE.

	THINGS I HAVE DONE THIS SCHOOL YEAR BECAUSE I AM INTERESTED	I HAVE DONE THIS THING				
		Never	Once	A few times	About once a month	At least once a week
113.	Read newspaper articles concerning scientific things, because I like to.	1	2	3	4	5
114.	Spent my own money for scientific things.	1	2	3	4	5
115.	Built or repaired radio sets or other electronic equipment, because I am interested.	1	2	3	4	5
116.	Read Popular Science, Popular Mechanics, National Geographic, or other science magazines, because I like to.	1	2	3	4	5
117.	Tried to find out about the lives of scientists.	1	2	3	4	5
118.	Watched science programs.	1	2	3	4	5
119.	Talked with adults about science, because I am interested.	1	2	3	4	5
120.	Tried to find out about scientific occupations such as aviation, engineering, farming, medicine.	1	2	3	4	5
121.	Talked with fellow students about scientific topics, because I am interested.	1	2	3	4	5
122.	Thought about problems like how the earth, the sun, the stars, or life came to be.	1	2	3	4	5
123.	Spent extra time on the science homework, because I like it.	1	2	3	4	5
124.	Spent time on preparing an exhibit for a science fair.	1	2	3	4	5
125.	Looked over the science books in libraries.	1	2	3	4	5
126.	Thought about such questions as "What is time?", "What is gravity?", "What is space?", "What is energy?"	1	2	3	4	5
127.	Visited a science museum because I like to.	1	2	3	4	5
128.	Tried to find out about the history of scientific discoveries.	1	2	3	4	5

SEMANTIC DIFFERENTIAL TEST

DIRECTIONS In this test, we want to find out how you describe different things. There are are no "right" or "wrong" answers. On each page in this booklet you will find a heading printed like this:

CHEMISTRY

The rest of the page contains pairs of words that you will use to describe your image of the heading at the top of the page. Each pair of words will be on a scale which looks like this:

QUICK ☐ ☐ ☐ ☐ ☐ ☐ ☐ SLOW

You are to make a check in the box which best represents how you feel that word pair describes the heading at the top of the page. For example, you might check the "QUICK-SLOW" scale this way for "CHEMISTRY."

If you feel that "CHEMISTRY" is very closely connected with "QUICK," check the scale like this:

QUICK ☑ ☐ ☐ ☐ ☐ ☐ ☐ SLOW

If you feel that "CHEMISTRY" is only somewhat connected with "QUICK," check the scale like this:

QUICK ☐ ☑ ☐ ☐ ☐ ☐ ☐ SLOW

If you feel that "CHEMISTRY" is equally connected with "QUICK" and "SLOW," or <u>not connected with either</u>, check the scale like this:

QUICK ☐ ☐ ☐ ☑ ☐ ☐ ☐ SLOW

If you feel that "CHEMISTRY" is somewhat connected with "SLOW" or very closely connected with "SLOW," you would check one of the boxes next to "SLOW" just as above.

Look at the heading at the top of the page; get an impression of it in your mind, and then work down the page checking the scales as <u>quickly</u> as you can. We are interested in your first impressions, so work rapidly and do not go back and change any marks.

<u>Be sure to check every scale</u> and only make one check on each scale.

PLEASE DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.

This Semantic Differential Test was developed for Harvard Project Physics by Fred Geis, Jr., in collaboration with the Evaluation Group of Harvard Project Physics.

NATURE

IMPORTANT	☐	☐	☐	☐	☐	☐	☐ UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐ NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐ DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐ DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐ KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐ WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐ ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐ CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐ EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐ COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐ DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐ UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐ HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐ STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐ DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐ SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐ MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐ EASY

BECOMING A PHYSICIST

IMPORTANT	☐	☐	☐	☐	☐	☐	☐ UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐ NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐ DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐ DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐ KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐ WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐ ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐ CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐ EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐ COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐ DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐ UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐ HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐ STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐ DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐ SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐ MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐ EASY

DOING LABORATORY EXPERIMENTS

IMPORTANT	☐	☐	☐	☐	☐	☐	☐	UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐	NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐	DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐	DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐	KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐	WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐	ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐	CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐	EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐	COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐	DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐	UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐	HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐	STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐	DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐	SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐	MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐	EASY

LEARNING ABOUT SCIENCE

IMPORTANT	☐	☐	☐	☐	☐	☐	☐	UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐	NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐	DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐	DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐	KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐	WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐	ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐	CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐	EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐	COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐	DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐	UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐	HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐	STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐	DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐	SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐	MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐	EASY

PHYSICS

IMPORTANT	☐	☐	☐	☐	☐	☐	☐	UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐	NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐	DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐	DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐	KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐	WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐	ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐	CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐	EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐	COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐	DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐	UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐	HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐	STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐	DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐	SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐	MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐	EASY

MYSELF AS A PHYSICS STUDENT

IMPORTANT	☐	☐	☐	☐	☐	☐	☐	UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐	NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐	DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐	DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐	KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐	WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐	ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐	CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐	EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐	COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐	DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐	UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐	HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐	STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐	DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐	SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐	MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐	EASY

UNIVERSE

IMPORTANT	☐	☐	☐	☐	☐	☐	☐	UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐	NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐	DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐	DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐	KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐	WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐	ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐	CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐	EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐	COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐	DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐	UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐	HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐	STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐	DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐	SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐	MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐	EASY

SOLVING PHYSICS PROBLEMS

IMPORTANT	☐	☐	☐	☐	☐	☐	☐ UNIMPORTANT
MESSY	☐	☐	☐	☐	☐	☐	☐ NEAT
SAFE	☐	☐	☐	☐	☐	☐	☐ DANGEROUS
INTERESTING	☐	☐	☐	☐	☐	☐	☐ DULL
UNKNOWABLE	☐	☐	☐	☐	☐	☐	☐ KNOWABLE
VALUABLE	☐	☐	☐	☐	☐	☐	☐ WORTHLESS
CLUTTERED	☐	☐	☐	☐	☐	☐	☐ ORDERLY
UNDERSTANDABLE	☐	☐	☐	☐	☐	☐	☐ CONFUSING
BORING	☐	☐	☐	☐	☐	☐	☐ EXCITING
THREATENING	☐	☐	☐	☐	☐	☐	☐ COMFORTING
SIMPLE	☐	☐	☐	☐	☐	☐	☐ DIFFICULT
PRODUCTIVE	☐	☐	☐	☐	☐	☐	☐ UNPRODUCTIVE
CAREFUL	☐	☐	☐	☐	☐	☐	☐ HAPHAZARD
MONOTONOUS	☐	☐	☐	☐	☐	☐	☐ STIMULATING
EFFORTLESS	☐	☐	☐	☐	☐	☐	☐ DEMANDING
RISKY	☐	☐	☐	☐	☐	☐	☐ SECURE
CLEAR	☐	☐	☐	☐	☐	☐	☐ MYSTERIOUS
HARD	☐	☐	☐	☐	☐	☐	☐ EASY

PHYSICS

NOT HISTORICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY HISTORICAL
NOT PHILOSOPHICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY PHILOSOPHICAL
NOT MATHEMATICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY MATHEMATICAL
NOT EXPERIMENTAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY EXPERIMENTAL
NOT ARTISTIC	☐	☐	☐	☐	☐	☐	☐	EXTREMELY ARTISTIC
NOT TECHNICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY TECHNICAL
NOT HUMANITARIAN	☐	☐	☐	☐	☐	☐	☐	EXTREMELY HUMANITARIAN
NOT SOCIAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY SOCIAL
NOT PRACTICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY PRACTICAL
NOT THEORETICAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY THEORETICAL
NOT DIFFICULT	☐	☐	☐	☐	☐	☐	☐	EXTREMELY DIFFICULT
NOT APPLIED	☐	☐	☐	☐	☐	☐	☐	EXTREMELY APPLIED
NOT BENEFICIAL	☐	☐	☐	☐	☐	☐	☐	EXTREMELY BENEFICIAL
NOT IMPORTANT	☐	☐	☐	☐	☐	☐	☐	EXTREMELY IMPORTANT
NOT INTERESTING	☐	☐	☐	☐	☐	☐	☐	EXTREMELY INTERESTING